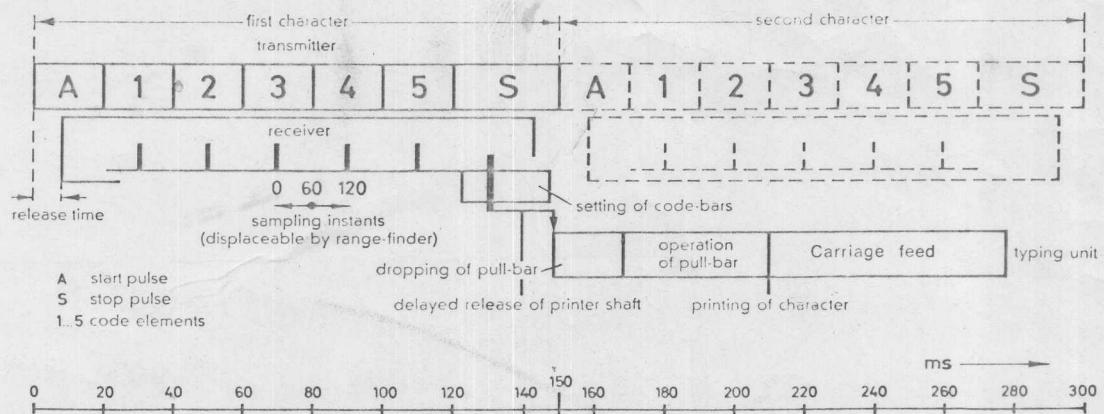


Timing diagram



Technical Data of Basic Version

Telegraph code	CCITT Alphabet No. 2
Telegraph speed	50 bauds
Typing speed	6 $\frac{2}{3}$ characters per second (400 o.p.m.; 66 w.p.m.)
Receive margin	> 42% } with $\pm 10\%$ ac power voltage
Outgoing signal distortion	< 5% } fluctuations
Line current	40 mA
Line voltage	120 V dc
Drive:	
Commutator motor	
Speed	3750 r/min (kept constant by a centrifugal contact governor)
Input voltages	220 V ac, 40 to 60 Hz (basic version) 240 V ac, 40 to 60 Hz 115 V ac, 40 to 60 Hz
Power consumption	approx. 70 W at rated voltage
Starting-up time	about 500 ms at 20° C and rated voltage
Speed checks	stroboscopically by means of tuning fork (125 Hz)
Synchronous motor	
Speed	3000 r/min at 50 Hz 3600 r/min at 60 Hz
Input voltages	220 V ac, 50 Hz/60 Hz 100 V to 135 V ac, 60 Hz 100 V to 135 V ac, 50 Hz
Power consumption	approx. 70 W at rated voltage
Start-up time	approx. 500 ms at 20° C ambient temperature and rated voltage
Induction motor	
Speed	2,500 r.p.m.
Connecting voltage	220 V ac, 50 Hz
Power draw	approx. 45 W at rated voltage
Automatic correction of the power frequency	up to ± 3 Hz
Starting-up time	less than 500 ms at 20° C and rated voltage

Tabulating attachment

This adjunct to the sprocket-feed device automates column true printing. The tabulating attachment operates in a similar way to the typewriter and only needs to be fitted to a teleprinter which transmits messages.

Teleprinter 100 S

(with storage transmitter)

The storage transmitter, included in this special version, automatically inserts the Letters and Figures characters in the keyed-in character sequence. It also acts as a cushion to absorb peaks in the keying speed which exceed the transmitting speed so that the keyboard lock, otherwise effective, can be omitted. Both characteristics make for more rapid typing with the Teleprinter 100 S; in this way the performance is increased considerably.

Receive-only teleprinter

Without the keyboard and keyboard transmitter the Teleprinter 100 can be used as receive-only machine and also operated in conjunction with reperforator and tape transmitter attachments.

Automatic carriage return and line feed attachment

In teleprinter traffic over interference-prone transmission circuits, telegraph signals are likely to be received in mutilated form. If the carriage return (CR) signal "<" is mutilated, the characters of the next line will be piled up on the end-of-line margin, or with the line feed (LF) signal "≡" missing, the following line will be printed over the preceding one. To provide a safeguard against this trouble, both functions are triggered automatically by this device in the event of one of these signals being received in mutilated form. If the machine works on trouble-free circuits the device can be deactivated.

Other telegraph speeds

By exchanging a couple of parts the teleprinter can be adapted to the telegraph speeds of 45.5 or 75 bauds.

A special version of the teleprinter can be supplied for operation at 100 bauds. This version can be readily converted to 50 or 75 bauds.

Bell contact

The teleprinter can be provided with a switch which, upon arrival of code combination "π" (bell), operates an audible alarm device, this having to be connected up separately.

Test signal generator

The test signal generator transmits current and no-current pulses of 18.75 msec length at a telegraph speed of 50 bauds in alternate succession for testing exchange equipment.

Version for 72 characters per line

This feature has to be installed in the teleprinter if it communicates with teleprinters printing 72 characters per line.

Version for 104 characters per line

If special requirements call for condensed type, provision has been made to print 104 characters on a normal line length at a character spacing of 1.65 mm.

Paper alarm device

If the paper is torn, the paper supply exhausted or the paper does not move with line feed, a contact is closed, causing an external alarm device to be actuated. In telex systems the existing connection is broken by transmission of the clearing signal. The machine is blocked against further calls.

Version for 78 characters

(with 3rd case shift)

Besides the Latin script, which is laid down for international Telex traffic, this teleprinter can also accommodate an alphabet whose script is non-Latin. The large number of characters is obtained by triple assignment of the type bars and a third elevation position of the type basket. Naturally, other characters such as mathematical or meteorological symbols can be transmitted instead of the second alphabet.

Version for scripts written from right to left

This special version writes from right to left. The equipment is therefore specially designed for the scripts of the countries in the Near East. Because of its accurate and neat print the Teleprinter 100 is particularly suitable for the recording of the elaborate and frequently combined characters of these scripts.

Special function contacts

These contacts can be installed to evaluate incoming 5-unit code signals, either individually or in the form of multi-character codes. They are provided for the remote control of alarm signaling and counting equipment or tape transmitters for call-down operation, or for the selective calling of a subscriber station in a multiaddress circuit.

International Telegraph Code No. 2

Nº	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Letters	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	<	≡	A	⋮	ZWR	
Figures	⋮	?	:	+	3				8	⋮	()	.	,	9	0	1	4	'	5	7	=	2	/	6	+						
Start Pulse																																
Code Element	1	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	
1	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	
2	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	
3	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	
4	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	
5	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	
Stop Pulse (150%)	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	

No-current pulse

Current pulse

Carriage return

Line feed

with neutral current operation

Who are you?

Free for internal traffic
in every country, but not permitted
in international traffic

Bell

1... Figures shift

A... Letters shift

ZWR Space

→ ASER BAUDOT COMP.

1111110000
011100011000

11100011000

0000 0

0001 1

0010 2

0011 3

0100 6

0101 5

0110 1

0111 7

1000 8

1001 9

1010 A.

1011 B.

1100 C.

1101 D.

1110 E.

1111 F.

	BAUDOT BIN?	HEX
A	11000	F8
B	10011	F3
C	01110	EE
D	10010	F2
E	10000	FO
F	10110	F6
G	01011	EB
H	01010	ES
I	01100	EC
J	11010	FA
K	11110	FE
L	01001	E9
M	01011	E7
N	01010	E6
O	01001	E3
P	01101	ED
Q	11101	FD
R	01010	EA
S	10100	F4
T	00001	E1
U	11100	FC
V	01111	EF
W	11001	F9
X	10111	F7
Y	11010	FS
Z	110001	FI
<	010010	E2
=	01100	E8.
ZWR	010020	E4
A...	11111	FF
I...	11011	FB.

D3 F3

30

W^o
Z,
L^o,
A_h

8 B_v
W_m
N_b

11111111

CB 1100 0011

HEAD
NOSE
EYES
FOOT